IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Detlef Teichner	**GROUP:**	2623
SERIAL NO:	09/890,315	**EXAMINER:**	Sumaiya Chowdhury
FILED:	January 9, 2002		
FOR:	LOCAL NETWORK IN A VEHICLE		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

RESPONSE TO NOTICE OF NON-COMPLIANT APPEAL BRIEF

This amended appeal brief is in response to the Notice of Non-Compliant Appeal Brief dated June 4, 2009. The grounds of rejection now corresponds to a heating within the argument section.

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being filed electronically via EFS-web with the Commissioner for Patents on the date below.

Sarah L. Henry

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6/8/09

Date

VII. ARGUMENT

REJECTIONS UNDER 35 U.S.C. §103 – CLAIMS 1-3, 5-10 AND 12-20 IN VIEW OF ROPPEL, REED, SEKINE, WAKAI, NG AND STANGER

CLAIM 1

Claim 1 recites a local network in a vehicle with several subscribers distributed over the vehicle, which form data sources and data sinks and which are connected with one another by a data line to transmit audio, video and control data. At least one data source is present for audio and video data and at least one data sink being present for the audio and video data transmitted over the data line. The at least one data source comprises *"a bit stream decoder to decode the compressed audio data...."* (cl. 1).

First, the Official Action contends that the claimed bit stream decoder reads on the opto-electrical converter 14 illustrated in FIG. 2 of Roppel. It is respectfully submitted that the claimed invention as a whole is not being considered. Specifically, the Official Action does not give the proper technical definition to the claimed bit stream decoder. The specification states *"[t]he unchanged, compressed audio data, which are present in a DVD disk 3, for example in accordance with the Dolby digital compression process, are decoded by a bit stream decoder 11. The bit stream decoder 11 is preferably constructed as a Dolby digital decoder,* ***and converts the compressed audio signals into uncompressed PCM signals****, which make possible Surround Sound (5 + 1 channels). The uncompressed audio data are then conducted to an audio buffer 8."* (emphasis added, clean copy of amended specification, pg. 25, lines 1-5). Thus, it is clear from the express claim language itself, and also the specification, that the bit stream **decoder** is a device that decodes compressed audio data. An opto-coupler is a not a device for decoding compressed audio data. An opto-coupler is a device that uses a short optical transmission path to

transfer a signal between elements of a circuit, typically a transmitter and a receiver, while keeping them electrically isolated - since the signal goes from an electrical signal to an optical signal back to an electrical signal, electrical contact along the path is broken. As illustrated in FIG. 2 of Roppel, the opto-electrical converter 14 element of an opto-coupler merely converts the received optical signal at the input 11 to an electrical signal – it does not decode a bit stream of audio data in preparation for the decoded audio data being made available on a data line (see the FIGURE of the application). Again, the claim as a whole must be considered.

In addition, in the claimed data source, the bit steam decoder is a device that is used to prepare data for transmission onto the data line. That is, as recited in claim 1 the bit stream decoder decodes the compressed audio data which is then buffered by the audio buffer and provided to the bus interface, which forms component bit groups for transmission onto the data line. In contrast, the opto-electrical converter 14 disclosed in Roppel is a device configured to receive data from the data line 3. Therefore, the motis-operandi of the bit stream decoder in claim 1 is entirely different than the opto-electrical converter 14 of Roppel.

Second, the Official Action contends that "[*a*] *decoder functions to convert data from one format into another. In Roppel, the opto-electrical converter converts the data in an optical signal into an electrical signal. As such, the claim limitation 'a bit stream decoder to decode the audio data' is met.*" (pg 2, subsection 1(a)). It is respectfully submitted that this is an improper reading of Roppel. Specifically, Roppel teaches that "[*i*]*n the component* [9], *control/monitoring bus 5 is connected to a bus interface 16, which is controlled by a microprocessor. Data source 1 with its* ***encoding circuit*** *communicates with the control unit via the microprocessor system. Component 9 has a bypass circuit 10. Input 11, which in this case is connected to a fiber-optic waveguide, must be provided with an opto-electronic converter 14.*" (col. 3, lines 27-34,

emphasis added). When "*switch 13 to the data source is flipped, ... the signals of the data source pass via electro-optic converter 15 to output 12 and data line 3.*" (col. 3, lines 43-45). That is, the encoded data from data source 1 passes through the switch 13, is converted, not encoded, from an electrical signal to an optical signal in the electro-optic converter 15, and is output onto the data line 3 as an encoded and converted signal. If the electro-optic converter 15 were to function as a decoder, the signal would first be encoded by the data source 1 and then be directly decoded by the electro-optic converter 15, which would be a technically fruitless operation. As such, the opto-electronic converter 14, which has the opposite function of the electro-optic converter 15, consequently is also not a decoder. Thus, according to a fair and proper reading, the opto-electronic converter 14 is necessarily NOT a bit stream decoder as recited in claim 1.

Third, the Official Action acknowledges that Roppel "*fails to teach... a demultiplexer to separate the compressed audio and the compressed video data in one compressed signal....*" (pg 4). Thereafter, the Official Action contends that Reed teaches "*a demultiplexer (demodulation module) to separate the compressed audio and compressed video data in one compressed signal (col. 22, lines 7-12).*" (pg 4). Applicants respectfully submit that the Official Action is not considering the claimed invention as a whole. Specifically, Reed teaches that "[*the*] *PEAC 69 or passenger entertainment auxiliary controller receives broadcast video programs such as panoramic camera, VTRs and the PFIS 50 and converts these signals into* [baseband frequency division multiplex] *format... The PEAC 69 provides preprocessing functions for the ESU 22 and control over the overhead video system. Inputs are processed and formatted and then routed to the ESU 22 and overhead video system. The PEAC 69 includes a control module and a demodulation module. The control module controls and coordinates the modular functions of the*

PEAC 69. The control module interprets commands received from the VCU 44 and issues commands for the voice activated and public address keyline process logic, VTRs, and the ESU 22 demodulators. The demodulation module is used to provide separation of BFDM inputs into their audio and video components for output of only one of the four audio channels to the mux audio system and the video signal to the overhead video system." (col. 21, line 57 to col. 22, line 12, emphasis added). Thus, according to a fair and proper reading of Reed, the broadcast video is received by the PEAC, converted into a multiplexed format, preprocessed and then demodulated in the ESU 22 demodulators to separate the audio and the video components. The audio and the video components are subsequently output to the audio and the video systems. That is, Reed explicitly teaches preprocessing the video signal **before** separating the audio and the video components from the multiplex signal. Therefore, Reed teaches away from the feature of "*a demultiplexer to separate the compressed audio and compressed video data contained in one compressed signal*" when read with the features of "*a bit stream decoder to decode the compressed audio data*" and "*a bit rate converter to recode the compressed video data....*" (cl. 1, emphasis added).

A fair and proper reading of the prior art references indicates that the scope and content of this prior art, and the combined prior art references, fail to disclose several features of the claimed invention at least as set forth above. Rejections of obviousness cannot be sustained by mere conclusionary statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In this case since the underpinnings relied upon in the Official Action are factually incorrect, the subject matter of claim 1 cannot be deemed obvious in view of the lengthy combination of prior art references

since the apparatus recited in claim 1 is more than a predictable use of prior art elements according to their established functions.

CLAIM 13

Claim 13 recites the feature *"the subscriber data source includes a demultiplexer that separates compressed audio data and compressed video data contained in one compressed source signal"* (cl. 13). The Official Action acknowledges that Roppel "*fails to teach... a demultiplexer to separate the compressed audio and the compressed video data in one compressed signal....*" (pg 4). The Official Action then contends that Reed teaches "*a demultiplexer (demodulation module) to separate the compressed audio and compressed video data in one compressed signal (col. 22, lines 7-12).*" (pg 4). Applicants respectfully submit that the Official Action is not considering the claimed invention as a whole.

Reed teaches that "[*the*] *PEAC 69 or passenger entertainment auxiliary controller receives broadcast video programs such as panoramic camera, VTRs and the PFIS 50 and converts these signals into* [baseband frequency division multiplex] *format... The PEAC 69 provides preprocessing functions for the ESU 22 and control over the overhead video system. Inputs are processed and formatted and then routed to the ESU 22 and overhead video system. The PEAC 69 includes a control module and a demodulation module. The control module controls and coordinates the modular functions of the PEAC 69. The control module interprets commands received from the VCU 44 and issues commands for the voice activated and public address keyline process logic, VTRs, and the ESU 22 demodulators. The demodulation module is used to provide separation of BFDM inputs into their audio and video components for output of only one of the four audio channels to the mux audio system and the video signal to the overhead*

video system." (col. 21, line 57 to col. 22, line 12, emphasis added). Thus, according to a fair and proper reading of Reed, the broadcast video is received by the PEAC, converted into a multiplexed format, preprocessed and then demodulated in the ESU 22 demodulators to separate the audio and the video components. The audio and the video components are subsequently output to the audio and the video systems. Thus, Reed explicitly teaches preprocessing the video signal **before** separating the audio and the video components from the multiplex signal. Therefore, Reed teaches away from the feature of "*a demultiplexer that separates compressed audio data and compressed video data contained in one compressed source signal*" when read with the features of "*a pre-processing circuit that processes in parallel the separated audio data and the separated video data to provide the audio data and the compressed video data that is transmitted to the respective subscriber data sinks on the network....*" (cl. 13, emphasis added).

A fair and proper reading of the prior art references indicates that the scope and content of this prior art, and the combined prior art references, fail to disclose several features of the claimed invention at least as set forth above. Rejections of obviousness cannot be sustained by mere conclusionary statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In this case since the underpinnings relied upon in the Official Action are factually incorrect, the subject matter of claim 13 cannot be deemed obvious in view of the lengthy combination of prior art references since the apparatus recited in claim 13 is more than a predictable use of prior art elements according to their established functions.

CLAIM 15

It is respectfully submitted that this rejection is now moot since claim 13 is patentable for at least the reasons as set forth above.

CLAIM 16

The Official Action contends the combination of Roppel, Reed, Sekine, Wakai, Ng and Stanger teaches the feature of "*a bit stream decoder for decoding the separated compressed audio data, and for converting the audio data into an uncompressed format....*" (cl. 16, emphasis added). Applicants respectfully disagree with the aforementioned characterization.

First, the Official Action contends that the claimed bit stream decoder at least partially reads on the opto-electrical converter 14 illustrated in FIG. 2 of Roppel. It is respectfully submitted that the claimed invention as a whole is not being considered. Specifically, the Official Action does not give the proper technical definition to the claimed bit stream decoder. The specification states "*[t]he unchanged, compressed audio data, which are present in a DVD disk 3, for example in accordance with the Dolby digital compression process, are decoded by a bit stream decoder 11. The bit stream decoder 11 is preferably constructed as a Dolby digital decoder, **and converts the compressed audio signals into uncompressed PCM signals**, which make possible Surround Sound (5 + 1 channels). The uncompressed audio data are then conducted to an audio buffer 8.*" (emphasis added, clean copy of amended specification, pg. 25, lines 1-5). Thus, it is clear from the express claim language itself, and also the specification, that the bit stream **decoder** is a device that decodes compressed audio data. An opto-coupler is a not a device for decoding compressed audio data. An opto-coupler is a device that uses a short optical transmission path to transfer a signal between elements of a circuit, typically a transmitter and a receiver, while keeping them electrically isolated - since the signal goes from an electrical signal to an optical signal back to an electrical signal, electrical contact along the path is broken. As illustrated in FIG. 2 of Roppel, the opto-electrical converter 14 element of an opto-coupler merely converts the received optical signal at the input 11 to an electrical signal – it does not

decode a bit stream of audio data in preparation for the decoded audio data being made available on a data line (see the FIGURE of the application). Again, the claim as a whole must be considered.

In addition, in the claimed data source, the bit steam decoder is a device that is used to prepare data for transmission onto the data line. That is, as recited in claim 1 the bit stream decoder decodes the compressed audio data which is then buffered by the audio buffer and provided to the bus interface, which forms component bit groups for transmission onto the data line. In contrast, the opto-electrical converter 14 disclosed in Roppel is a device configured to receive data from the data line 3. Therefore, the motis-operandi of the bit stream decoder in claim 1 is entirely different than the opto-electrical converter 14 of Roppel.

Second, the Official Action contends that "[*a*] *decoder functions to convert data from one format into another. In Roppel, the opto-electrical converter converts the data in an optical signal into an electrical signal. As such, the claim limitation 'a bit stream decoder to decode ... is met.*" (pg 2, subsection 1(a)). It is respectfully submitted that this is an improper reading of Roppel. Specifically, Roppel teaches that "[*i*]*n the component* [9], *control/monitoring bus 5 is connected to a bus interface 16, which is controlled by a microprocessor. Data source 1 with its* ***encoding circuit*** *communicates with the control unit via the microprocessor system. Component 9 has a bypass circuit 10. Input 11, which in this case is connected to a fiber-optic waveguide, must be provided with an opto-electronic converter 14.*" (col. 3, lines 27-34, emphasis added). When "*switch 13 to the data source is flipped, ... the signals of the data source pass via electro-optic converter 15 to output 12 and data line 3.*" (col. 3, lines 43-45). That is, the encoded data from data source 1 passes through the switch 13, is converted, not encoded, from an electrical signal to an optical signal in the electro-optic converter 15, and is output onto the data line 3 as

an encoded and converted signal. If the electro-optic converter 15 were to function as a decoder, the signal would first be encoded by the data source 1 and then be directly decoded by the electro-optic converter 15, which would be a technically fruitless operation. As such, the opto-electronic converter 14, which has the opposite function of the electro-optic converter 15, consequently is also not a decoder. Thus, according to a fair and proper reading, the opto-electronic converter 14 is necessarily NOT a bit stream decoder as recited in claim 1.

A fair and proper reading of the prior art references indicates that the scope and content of this prior art, and the prior art references as a whole fail to disclose several features of the claimed invention at least as set forth above. Rejections of obviousness cannot be sustained by mere conclusionary statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In this case since the underpinnings relied upon in the Official Action are factually incorrect, the subject matter of claim 16 cannot be deemed obvious in view of the lengthy combination of prior art references since apparatus recited in claim 16 is more than a predictable use of prior art elements according to their established functions.

CLAIM 19

Claim 19 recites the feature *"separating compressed digital audio and compressed digital video data contained in the compressed signal by demultiplexing the compressed signal, where the bit positions for the audio and video data within the compressed signal are collected together in several connected component bit groups...."* (cl. 19). The Official Action acknowledges that Roppel *"fails to teach... a demultiplexer to separate the compressed audio and the compressed video data in one compressed signal...."* (pg 4). The Official Action then contends that Reed teaches *"a demultiplexer (demodulation module) to separate the compressed*

audio and compressed video data in one compressed signal (col. 22, lines 7-12)." (pg 4). Applicants respectfully submit that the Official Action is not considering the claimed invention as a whole.

Reed teaches that "[*the*] *PEAC 69 or passenger entertainment auxiliary controller receives broadcast video programs such as panoramic camera, VTRs and the PFIS 50 and converts these signals into* [baseband frequency division multiplex] *format... The PEAC 69 provides preprocessing functions for the ESU 22 and control over the overhead video system. Inputs are processed and formatted and then routed to the ESU 22 and overhead video system. The PEAC 69 includes a control module and a demodulation module. The control module controls and coordinates the modular functions of the PEAC 69. The control module interprets commands received from the VCU 44 and issues commands for the voice activated and public address keyline process logic, VTRs, and the ESU 22 demodulators. The demodulation module is used to provide separation of BFDM inputs into their audio and video components for output of only one of the four audio channels to the mux audio system and the video signal to the overhead video system.*" (col. 21, line 57 to col. 22, line 12, emphasis added). Thus, according to a fair and proper reading of Reed, the broadcast video is received by the PEAC, converted into a multiplexed format, preprocessed and then demodulated in the ESU 22 demodulators to separate the audio and the video components. The audio and the video components are subsequently output to the audio and the video systems. Thus, Reed explicitly teaches preprocessing the video signal **before** separating the audio and the video components from the multiplex signal. Therefore, Reed teaches away from the feature of "*separating compressed digital audio and compressed digital video data contained in the compressed signal by demultiplexing the compressed signal, where the bit positions for the audio and video data within the compressed*

signal are collected together in several connected component bit groups" when read with the feature of "*parallel processing the compressed audio data and the compressed video data to generate uncompressed audio data and compressed video data that is correlated in time for subsequent transmission....*" (cl. 19, emphasis added).

A fair and proper reading of the prior art references indicates that the scope and content of this prior art and the combined prior art references fail to disclose several features of the claimed invention at least as set forth above. Rejections of obviousness cannot be sustained by mere conclusionary statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In this case since the underpinnings relied upon in the Official Action are factually incorrect, the subject matter of claim 19 cannot be deemed obvious in view of the lengthy combination of prior art references since apparatus recited in claim 19 is more than a predictable use of prior art elements according to their established functions.

REJECTIONS UNDER 35 U.S.C. §103 – CLAIM 4 IN VIEW OF ROPPEL, REED, SEKINE, WAKAI, NG, STANGER AND KAWAMURA

It is respectfully submitted that this rejection is now moot since claim 1 is patentable for at least the reasons as set forth above.

REJECTIONS UNDER 35 U.S.C. §103 – CLAIM 11 IN VIEW OF ROPPEL, REED, SEKINE, WAKAI, NG, STANGER AND FUJII

It is respectfully submitted that this rejection is now moot since claim 1 is patentable for at least the reasons as set forth above.

VIII. CONCLUSION

For all the foregoing reasons, applicants submit that the rejection of claims 1-20 is erroneous and reversal thereof is respectfully requested.

If there are any additional fees due in connection with the filing of this appeal brief, please charge them to our Deposit Account No. 50-3381.

Respectfully submitted,

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